

REMARKS

In the present Amendment, claims 11 and 30 have been amended to define the "X" in formula (R₃)ZX_b as "X is chlorine or bromine." Section 112 support for the Amendment is found, for example, in paragraph [0055] of the specification. No new matter has been added, and entry of the Amendment is respectfully requested.

Claims 1-9 and 11-37 are pending.

In paragraph No. 3 of the Action, claims 1-9 and 11-37 are rejected under 35 U.S.C. § "102(e)" as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being obvious over Hsu et al (US 2002/0120082, "Hsu") or Halasa et al (US 2005/0131181, "Halasa") each taken alone and in the alternative.

Applicants submit that this rejection should be withdrawn because Hsu and Halasa do not disclose or render obvious the present invention.

The Examiner contends that Hsu and Halasa each show the polymerization of 1,3-butadiene with the claimed amine containing functional compounds using lithium amine compounds. The Examiner refers to Hsu at [0019], [0020] and [0027] and Halasa at [0068] and [0073]-[0079].

Solution polymerization using hydrocarbon solvents is shown in Examples of Halasa and Hsu. The use of ethers, and chelating agents is discussed at [0035]-[0037] and [0043] of Hsu and in Halasa at [0088] and [0097]. Tin tetrachloride is disclosed as one of the coupling agents in [0041] of Hsu.

The Examiner further contends that there are no significant amounts of "PCA's" used in either composition. However, the Examiner states, the claims are essentially treated as product-

by-process claims and there is no discernable difference between the rubber components of the art and that as claimed.

In the event that one of ordinary skill would not immediately envisage the claimed limitations, the Examiner takes the position that the claims are prima facie obvious given that each of the claimed components is disclosed and suggested to be used in combination with one another.

Applicants respectfully disagree.

Hsu and Halasa do not disclose a process oil or a processing oil in detail. Hsu uses a process oil in an amount of 5 phr in paragraph [0080], and Halasa uses a processing oil in an amount of 10 phr in paragraph [0260]. However, Hsu and Halasa do not disclose a content of a polycyclic aromatic compound (PCA) in these oils. Further, Hsu and Halasa do not teach or suggest a method for removing the polycyclic aromatic compound (PCA) from these oils, as described in paragraph [0068] of the present specification. Therefore, both of the oils used by Hsu and Halasa still contain a large amount of the polycyclic aromatic compound (PCA), and thereby both of the rubber compositions disclosed in Hsu and Halasa must comprise more than 1.0 part by mass of the polycyclic aromatic compound (PCA) based on 100 parts by mass of the rubber component.

The manufacturers in Japan started to supply a softening agent containing a small amount of a polycyclic aromatic compound (PCA) in year 2002. Therefore, the softening agent capable of satisfying the PCA content defined in the present invention was not available in 2001 when US 2002/0120082 was filed by Hsu, so that the process oil used by Hsu must contain a large amount of the polycyclic aromatic compound (PCA) and the rubber composition disclosed in

Hsu must comprise more than 1.0 part by mass of the polycyclic aromatic compound (PCA) based on 100 parts by mass of the rubber component.

Furthermore, the present invention uses a terminal-modified polymer. In contrast, Halasa does not use such a terminal-modified polymer. The modified polymer used by Halasa includes an amino compound as a pendant group in its polymer chain. In addition, the amino compound used by Halasa is notably different from that used in the present invention, and therefore the modified polymer used by Halasa is completely different from the terminal-modified polymer used in the present invention.

In view of the above, the present claims are not anticipated by or obvious over Hsu or Halasa. Reconsideration and withdrawal of the §§102/103(a) rejection based on Hsu or Halasa are respectfully requested.

Allowance is respectfully requested. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Hui C. Wauters / Reg. No. 33,725
Hui C. Wauters
Registration No. 57,426

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: March 17, 2009